

PENDING CLAIMS

1. (currently amended) A card processing system comprising:  
a data processing station; and  
~~a portable card adapted to be used in a card processing~~  
~~system having a data processing station comprising including:~~  
a protective housing; and  
a data storage device movably coupled to the protective  
housing for interacting adapted to interact with the data  
processing station when the portable card carrier and the data  
processing station are moved relative to each other, said data  
storage device including:
  - a substrate having a generally rectangular shape;
  - a hard disk drive recording medium including at least  
one layer of high density, high coercivity magnetic material  
including a plurality of magnetic domains for storing  
magnetic signals, said plurality of magnetic domains having  
an areal density of between 2 megabits per sq. in. to about  
10 gigabits per sq. in. and having a storage capability of  
more than 500 megabytes; and
  - a relatively hard, abradeable protective coating  
formed on said magnetic material layer ~~and being selected~~  
~~to have a thickness between a maximum thickness which would~~  
~~materially attenuate magnetic signals passing between said~~  
~~magnetic material layer and a transducer and a minimum~~  
~~thickness enabling said protective coating to be abraded by~~  
~~usage in an ambient natural atmosphere operating~~  
~~environment for removing therefrom a known quantity of the~~  
~~protective coating,~~wherein the protective coating has at least one layer which  
includes a magnetically permeable, magnetically saturable  
material, and

a wherein the protective housing ~~having~~ has at least one housing section that is movable relative to the data storage device such that said data storage device is shielded by said at least one housing section when said at least one housing section is in a first position, and said data storage device is operably exposed for interaction with the data processing station when said at least one housing section is in a second position.

2. (canceled)

3. (canceled)

4. (currently amended) The ~~portable-card~~ system of claim 1 wherein said substrate includes one side which is longer than the other side.

5. (currently amended) The ~~portable-card~~ system of claim 4 wherein said stored magnetic signals are stored in arcuate shaped track extending between two opposed sides of said rectangular shape.

6. (currently amended) The ~~portable-card~~ system of claim 4 having two longer sides wherein said stored magnetic signals are stored in arcuate shaped track extending between said two longer sides of said rectangular shape.

7. (currently amended) The ~~portable-card~~ system of claim 4 having two longer sides wherein said stored magnetic signals are stored in arcuate shaped track extending between said two shorter sides of said rectangular shape.

8. (currently amended) The ~~portable card~~ system of claim 4 having two longer sides wherein said stored magnetic signals are stored in circular shaped tracks located between said two longer sides of said rectangular shape.

9. (currently amended) The ~~portable card~~ system of claim 8 wherein said stored magnetic signals are stored in circular shaped tracks located centrally between said two longer sides of said rectangular shape.

10. (currently amended) A card processing system comprising a portable card adapted to be used in and a card processing system having a data processing station, wherein the portable card comprises: comprising:

a protective housing; and

a data storage device movably coupled to the protective housing for interacting adapted to interact with the data processing station when the portable card and the data processing station are moved relative to each other, said data storage device including:

a substrate having a generally rectangular shape and a pair of longer sides which are longer than a pair of shorter sides shape;

a hard disk drive storage medium including at least one layer of high density, high coercivity magnetic material including a plurality of magnetic domains for storing magnetic signals, said magnetic material having an areal density of about 10 gigabits per sq. in and having a storage capability in the range of 1 megabyte and 500 megabytes; and

a diamond-like hardness, abradable protective coating formed on said magnetic material layer ~~and being selected~~

~~to have a thickness between a maximum thickness which would materially attenuate magnetic signals passing between said magnetic material layer and a transducer and a minimum thickness enabling said protective coating to be abraded by usage in an ambient natural atmosphere operating environment for removing therefrom a known quantity of the protective coating,~~

wherein protective coating has at least one layer which includes a magnetically permeable, magnetically saturable material, + and

wherein the a protective housing ~~having~~ has at least one housing section that is movable relative to the data storage device such that data storage device is shielded by said at least one housing section when said at least one housing section is in a first position, and said data storage device is operably exposed for interaction with the data processing station when said at least one housing section is in a second position.

11. (canceled)

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (currently amended) The ~~portable card~~ system of claim 10 wherein said stored magnetic signals are stored in at least one circular shaped track located between pair of longer sides.

17. (currently amended) The ~~portable card~~ system of claim 16 wherein said stored magnetic signals are stored in at least one circular shaped track located centrally between pair of longer sides of said rectangular shape.

18. (canceled)

19. (currently amended) The ~~portable-card~~ system of claim 10 wherein said at least one magnetic material layer is a thin film layer of high density, high coercivity magnetic material having a predetermined magnetic field orientation for storing data.

20. (canceled)

21. (currently amended) The ~~portable-card~~ system of claim 10 wherein protective coating has at least two layers wherein one of said layers includes a magnetically permeable, magnetically saturable material and the other of said layers is a non-magnetic friction reducing layer formed on said one of said layers.

22. (currently amended) The ~~portable-card~~ system of claim 10 wherein said protective has an outer surface that is cleanable.

23. (currently amended) The ~~portable-card~~ system of claim 10 wherein said substrate has two surfaces and said protective coating is applied to at least one of said two surfaces.

24. (currently amended) The ~~portable-card~~ system of claim 10 wherein said substrate has two surfaces and said protective coating is applied to at least one of said two surfaces and wherein said data storage device is located on the other of said two surfaces and said protective coating is applied to at least said data storage device.

25. (currently amended) The ~~portable-card~~ system of claim 10 having an obverse side and a converse side and wherein said substrate has two surfaces and wherein said data storage device is located on one of said two surfaces and said protective coating is applied to each of said obverse side and converse side.

26. (currently amended) The ~~portable-card~~ system of claim 10 wherein said protective coating has an outer surface and further comprises

a bonded lubricant layer formed on said outer surface and having a thickness which is less than the thickness of said protective coating.

27. (previously presented) The portable card of claim 10 wherein said protective coating is adapted to interface with and be responsive to a data processing station when said substrate and data processing station are moved relative to each other to position said substrate proximate said data processing station to enable data flow therebetween.

28. (currently amended) The ~~portable-card~~ system of claim 10 wherein said substrate is moved relative to said data processing station.

29. (currently amended) The ~~portable-card~~ system of claim 10 wherein said data processing station is moved relative to said substrate.

30. (currently amended) The ~~portable-card~~ system of claim 10 wherein said data processing station and said substrate are moved relative to each other.

31. (canceled)

32. (canceled)

33. (canceled)

34. (canceled)

35. (canceled)

36. (canceled)

37. (canceled)

38. (canceled)

39. (canceled)

40. (canceled)

41. (canceled)

42. (canceled)

43. (canceled)

44. (canceled)

45. (canceled)

46. (canceled)

47. (currently amended) The ~~portable-card~~ system of claim 19 wherein said at least one thin film layer of high density, high coercivity magnetic material is a sputtered layer.

48. (currently amended) The ~~portable-card~~ system of claim 19 wherein said at least one thin film layer of high density, high coercivity magnetic material is a plated layer.

49. (currently amended) The ~~portable-card~~ system of claim 19 wherein said at least one thin film layer of high density, high coercivity magnetic material is an oxide layer.

50. (currently amended) The ~~portable-card~~ system of claim 19 wherein said at least one thin film layer of high density, high coercivity magnetic material is a web coated layer.

51-80. (canceled)